



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,830	06/27/2006	Luciano Salice	SALICE-1 PCT	4076
25889	7590	02/09/2009		
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576				
EXAMINER				
MORGAN, EMILY M				
ART UNIT		PAPER NUMBER		
3677				
MAIL DATE		DELIVERY MODE		
02/09/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/584,830

**Applicant(s)**

SALICE, LUCIANO

**Examiner**

EMILY M. MORGAN

**Art Unit**

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-27 is/are pending in the application.
- 4a) Of the above claim(s) 18, 19, 23 and 25-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-17, 20-22 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "first direction" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by patent 6859979 to Egger.

Regarding claim 1, Egger discloses a furniture hinge (for cabinet fitting, abstract) comprising: a fixing arm 2 for fixing to a piece of furniture, means for fixing to a door of said piece of furniture, incorporating a cup 5, first 4 and second 3 rockers, forming an articulated quadrilateral and joining said fixing arm 2 to said cup 5 so as to allow reciprocal pivoting thereof (opening and closing the cabinet, column 1, line 53), a connection element 34 fixed to the first rocker 4, damping means 7 of said reciprocal pivoting comprising a slider 8, controlled in translation by the connection element 34 and suitable to translate according to a first direction (shown in the movements between figures 7 and 8) corresponding to a pivoting of the hinge, said slider 8 cooperating with kinematic means for motion conversion suitable to convert a translational motion of the

slider into a damping pivoting motion (column 4, lines 6-12), the hinge being wherein the damping means 7 comprise a housing 6, separate from said cup 5, enclosing said slider 8, damping moving elements 15, 16, and said kinematic means for motion conversion, and are provided with fast connection means 19 to said cup 5 so that said slider 8 and said damping moving elements 15, 16 are suitable to be assembled with one another with the housing 6 so that said damping means form a single element suitable to be fixed to one end of said cup in a single operation (screwing the housing 6 to the cup 5).

Regarding claim 16, Egger discloses the hinge according to claim 14, wherein said damping moving elements 15, 16 are circular in shape (figure 4), immersed in a viscous means (column 3, lines 6-7) which wets the outer surfaces thereof ("between the fixed and movable brake surfaces", column 3, line 7), and suitable to pivot about an axis perpendicular to the first direction (Egger discloses a hinge suitable to pivot around an axis perpendicular to the pins) so as to cause a braking force corresponding to movements of the hinge (braking force can only be created when the hinge is moved, since a static hinge creates no forces in any direction).

Regarding claim 17, Egger discloses the furniture hinge according to claim 16, wherein said damping moving elements 15, 16 comprise a flat shaped disc (figure 4).

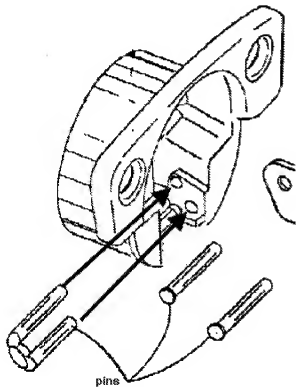
***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

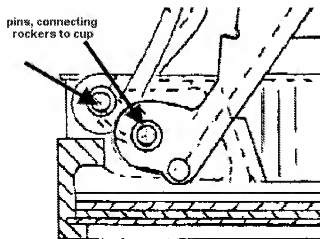
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egger.

Regarding claim 15, Egger discloses the hinge according to claim 14, wherein said fast connection means 19 are pins (figure 4) suitable to engage first holes of the housing and second holes of the cup. The pins are shown in figure 4 near holes in the cup, shown below. These pins are placed in the same position as the holes in the cup, so the fast connection means uses pins in holes in the cup, shown by Egger.



In the figure below, these pins are used to connect the rockers to the cup, shown in figure 2.



Egger does not disclose the pins connecting through the housing as well as the cup.

The difference between the claim and Egger is the claim recites: the pins go through the housing as well as the cup. It would have been obvious to one of ordinary skill in the art at the time the invention was made to shape the housing to accommodate the pins since it has been held that mere duplication of the essential working parts of a device involves only routine skilled the art. *St. Regis Paper Co. v. Bemis Co.*, 193 *USPQ* 8. This would ensure that the housing stays in place. Placing the pins through the housing as well as the cup creates a second and third connection between the two articles, preventing the housing from separating. This would prevent the viscous fluid from leaking, causing damage to the hinge, as well as causing damage to the hinged article. This would be motivated by creating a duplicate connection point, ensuring that a separation between the housing and cup would not occur. In the case above, it was found that while the addition of multiple plies to the concept of the Poppe had undoubtedly made it stronger, it is not the type of innovation for which a patent monopoly is to be granted.

Regarding claim 20, Egger discloses the furniture hinge according to claim 17, wherein the kinematic means for motion conversion comprise a series of grooves 24, 23, 29, 28 on the disc and a protuberance 14, 13 fixed on the slider 8 which couples engages with at least one groove (figure 5) shaped to cause rotation pivoting of the disc (abstract). Egger discloses the claimed invention except for the shape of the grooves. It would have been obvious to one having ordinary skill in the art at the time the invention as made to make the grooves a spiral, a change in the shape of a prior art



device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 21, Egger discloses the furniture hinge according to claim 20, wherein the spiral grooves have profiles with saw toothed tooth sections and the protuberance on the slider has a profile with a section having a complementary shape to the profiles of the grooves. Egger discloses having saw-toothed grooves in discs in figure 10. The brake disks 35 and 38 have saw tooth grooves, and external rings 37 and 40 have complimentary saw tooth grooves. Egger also discloses the slider 8 having a complimentary shape to grooves in the brake plates, shown in figure 5. Note that it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. See also, *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice). It would have been obvious to one of ordinary skill in the art at the time of the invention to make the brake plate have saw tooth grooves within the shaped groove mentioned in claim 20, and have correspondingly shaped grooves on the slider. This would be motivated by the desire to reduce the number of parts necessary. Modifying Egger in this manner would eliminate the rings 37 and 40, since its purpose would be incorporated into the slider. Fewer pieces in the hinge would result in lesser material costs, shorter assembly and machining time, all of which would reduce the cost of manufacturing the hinge.

Claims 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egger as applied to claims above, and further in view of patent 3102311 to Martin.

Regarding claim 22, Egger discloses the furniture hinge according to claim 21, but does not disclose engaging the grooves in one direction.

Martin discloses a zip tie is a plastic article that ties items together similarly to rope. The zip tie is a quick application, wrapping the tie around the articles, inserting the end into the locking part, and pulling tight. The long end of the zip tie is covered in ridges, which is frictionally grabbed by the locking part. The long end slides through the locking part easily, but does not allow the long end to slide out in the opposite direction without assistance.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the uni-directional grooves of the zip tie into the hinge braking assembly of Egger. This would be motivated by creating a consumer pleasing cabinet hinge. Many consumers do not appreciate a heavy door accidentally slamming shut, creating a loud noise and possible damage to the cabinet. For purposes of expedience, braking the opening direction would be undesirable by consumers. It would be desired by the consumer to brake the door in the closing direction rather than the opening direction. In order to boost sales of a cabinet hinge, incorporating the uni-direction braking would attract consumers to this particular hinge.

Regarding claim 24, Egger as modified discloses the furniture hinge according to claim 22. As discussed in claim 21, the slider has protuberances, which would correspond to saw tooth grooves as modified with the second embodiment of Egger. This modification of Egger would produce the hinge wherein the protuberance on the slider is provided with a substantially pointed end, suitable to press on the profiles with saw tooth sections of the spiral grooves. These would interact during closing of the door starting from a partially open position of the door itself, and interact during any motion of the cabinet door.

### ***Response to Arguments***

Applicant's arguments filed 11/10/2008 have been fully considered but they are not persuasive.

Regarding the restriction, the examiner has made final the restriction, and the mere request for reconsideration will not warrant any alteration of the restriction.

Regarding the priority document, examiner thanks applicant for submitting the appropriate papers.

Regarding the indefinite rejection, examiner notes that "the first direction" was also claimed in claim 14. Since examiner cannot find this "first direction" in the drawings, the rejection has been overturned, and in its place is a drawing objection.

Examiner notes that most of pages 3-5 are a summary of the invention, and thanks applicant.

Regarding Egger, examiner notes that applicant argues that the Egger invention cannot exist in separate functioning damping device. Having a separate functioning dampening assembly separate from the hinge cup is not claimed in claim 14. Examiner points out that the damping means can certainly exist as a separate entity away from the hinge cup, although it may not be functional.

Regarding Martin, the Martin reference is applied for the motivation and common knowledge of a user's desire to apply a locking method for one direction of use in common articles. Martin discloses an easily inserted end to tighten the rope, and a difficult to release mechanism that allows users to be confident that the article tie does not fail and allow the tied articles to stay in a particular position. This concept has been applied to numerous applications, including winches and electronics hinges.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMILY M. MORGAN whose telephone number is (571)270-3650. The examiner can normally be reached on Monday-Thursday, alternate Fri, 7:30am to 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor Batson/  
Supervisory Patent Examiner, Art Unit 3677

Emm  
/EMM/

